

**RESPONSES TO EPA REGION III INVITATION TO SETTLEMENT FOR THE RADFORD ARMY
AMMUNITION PLANT (RFAAP) DATED JANUARY 26, 2016
March 30, 2016**

I. Resource Conservation and Recovery Act (RCRA, Subtitle C) Alleged Violations

A. Improper Treatment and Failure to Manifest Hazardous Wastes

EPA's January 26, 2016 letter identifies three shipments of composite samples of ash from the incinerator and open burn ground as follows – February 14, 2013, April 25, 2013, and June 19, 2013. The letter states that the main laboratory improperly disposed of these ash samples in general trash without making a hazardous waste determination.

Response: The main laboratory uses ash samples weighing 30 grams to perform testing for hazardous waste determinations. In the instances identified in EPA's letter, after reactivity testing was completed, the remaining ash was placed into the general trash for disposal. BAE has no test data or other information indicating that the general trash coming from the main laboratory was hazardous waste. However, as a precautionary measure, the main laboratory established a procedure whereby all ash remaining from testing is placed in a hazardous waste satellite accumulation area. When the accumulation container is full it is moved to a less than 90-day storage area and shipped offsite. BAE believes it is operating in full compliance with applicable RCRA requirements for this material.

B. Improper Accumulation of Hazardous Waste in BAE's 90-day Accumulation Areas

EPA's letter states that BAE improperly received and stored tenant (New River Energetics [aka, ATK]) waste materials at less than 90-day accumulation areas during the period August 9, 2013 through October 6, 2013.

Response: The RFAAP TSD permit allows waste materials received from the tenant to be received and stored in BAE's less than 90-day accumulation areas. Effective August 16, 2012, VDEQ approved a Class 1 Permit Modification that removed the provision stating that "Only wastes generated at RFAAP by the permittees may be stored or treated at the permitted treatment and storage areas" and replaced it with a provision stating that "Only wastes generated at RFAAP may be stored or treated at the permitted treatment and storage areas." The reason for this change was that ATK was going to continue operations at RFAAP as a tenant that generated hazardous waste, so the modification allowed storage of ATK's waste materials at the permitted storage areas.

A copy of the approved permit modification is enclosed as Attachment A. The permit modification was in effect at the time of EPA's February 4-13, 2014 inspection at

RFAAP. Therefore, BAE believes it is operating in compliance with applicable permit requirements for these tenant materials.

II. Clean Water Act (CWA) Alleged Violations

A. Failure to Sample in Compliance with Permit/CWA 40 CFR Part 136/O&M Manual

Outfalls 007 and 029

EPA's letter states that RFAAP collected 24-hour composite samples using an automatic sampler with plastic tubing and a plastic sample container, instead of collecting grab samples in a glass bottle, for the annual Discharge Monitoring Reports (DMRs) for July 2012 and July 2013 and for monthly DMRs relating to 2,4-Dinitrotoluene and Di-n-butyl phthalate.

Response: We believe the sample collection procedures that were previously followed were representative of the effluent discharge from these outfalls. However, BAE has revised its sample collection procedures to assure that grab sample types and glass collection containers are used.

Outfalls 041, 044, and 050

EPA's letter states that BAE Systems personnel reported collecting oil and grease samples from these outfalls using plastic sample containers, instead of glass bottles.

Response: BAE Systems is not able to validate the recollections of the person or persons who provided this information in 2014. We believe the sample collection procedures that were followed were representative of the effluent discharge from these outfalls. However, BAE has revised its sample collection procedures to assure that grab sample types and glass collection containers are used.

B. Unauthorized Discharges in Violation of Permit

Outfall 007

EPA's letter states that the DMR for February 2013 reported a biological oxygen demand (BOD) monthly average of 244 kg/day, which is higher than the BOD monthly average discharge limitation of 233 kg/day in the facility's permit. The letter also states that EPA would like to discuss the manner in which pH is monitored at the outfall.

Response: The February 2013 DMR submitted to VDEQ accurately reported the monthly average BOD discharge at the outfall. Submittal of the DMR to VDEQ constituted proper reporting of the exceedance.

BAE is prepared to discuss any questions EPA may have regarding the manner in which

pH is monitored at the outfall. BAE notes that it is not aware of a relationship between pH and BOD.

Outfall 004

EPA's letter states that a June 6, 2013 discharge of 450 gallons of untreated wastewater containing coal fines constituted a release in violation of the facility's CWA permit.

Response: Per the June 10, 2013 notification to VDEQ, the discharge occurred when stormwater bypassed a clogged filtration screen in the secondary containment basin around the coal pile. BAE Systems implemented revised management procedures for the coal pile, including a daily maintenance checklist to prevent this type of discharge from occurring.

BAE notified VDEQ of the incident within the time frame required under the permit. A copy of the notification letter is provided as Attachment B. No further incidents have occurred, and BAE believes it is operating in full compliance with these CWA permit requirements.

III. Emergency Planning and Community Right to Know Act (EPCRA) Alleged Violations – Failure to File Form R

EPA's letter states that RFAAP exceeded the planning threshold for copper compounds but did not submit a Form R for copper.

Response: BAE Systems typically submits fourteen TRI/Form R reports to EPA annually. For Report Year 2012 (the first reporting year after BAE assumed operations in July 2012, the facility is listed as having used 44,080 pounds of copper compounds based upon the total weight of the compound metal. However, BAE used only approximately 4,937 pounds of copper based on the percentage of copper in the compound. Initially, BAE did not submit a Form R for copper because the weight of copper actually used was less than the 25,000 pound planning threshold. However, BAE revised its calculations based upon EPA's compound rule guidelines, and submitted a corrected Form R including copper on May 21, 2014. A copy of the RY2012 Form R for copper is provided as Attachment C.

IV. Clean Air Act (CAA) Alleged Violations

EPA's letter references pages 19-36 of EPA's December 2014 Multimedia Compliance Investigation report containing a summary of "potential areas of non-compliance" relating to the powerhouse and incinerators.

Response: BAE has reviewed the areas of potential concern identified in EPA's Investigation report. As a threshold matter, many of the potential issues identified in the report occurred in 2011 and the first six months of 2012, which pre-dates BAE's involvement at the RFAAP facility. BAE became the operating contractor effective July

1, 2012. All of the data and events for the time period prior to July 1, 2012 occurred when the facility was operated by the former contractor, ATK. BAE was not involved in the operation of the powerhouse and incinerators or collection of data during this period. As such, BAE is not responsible for any potential issues of non-compliance during this period and cannot provide information on the accuracy or completeness of any data for the period prior to July 1, 2012.

For the period of BAE's operations, we have reviewed the Investigation report and believe that all of the areas of potential concern related to the incinerators (pages 19-33) are in compliance with the destruction and removal (DRE) standards and pollutant-specific emissions standards. In sum, the identified issues are not violations because the data was measured during a malfunction period as documented in the semiannual reports, occurred when no waste was being fed to the unit, or appear to be due to error in EPA's data query or calculations. A more detailed response for each issue of potential concern is provided in Attachment D.

With respect to the powerhouse-related findings (pages 33-36), we have determined that nearly all of the findings are in compliance with the applicable standards or were instances of opacity deviations that were properly reported to and addressed by VDEQ. We have identified six discreet opacity deviations that were reported to VDEQ in 2015. A more detailed response for each powerhouse-related finding is provided in Attachment E.

BAE is prepared to discuss each of the Investigation report findings in order to address any remaining questions.

V. CAA Section 112(r) Alleged Violations

A. Five-year Accident History

EPA's letter states that RFAAP did not update the facility's five-year accident history as required for the July 1, 2012 oleum release or the October 15, 2012 ethyl ether release.

Response: BAE Systems reviewed and updated the five-year accident history to include the July 1, 2012 oleum tank release event. See Attachment F.

The ethyl ether release event was reviewed and determined not to require accident history reporting. No injury occurred and no property damage or environmental impacts were identified. Per EPA guidance, the term "injury" includes any effect on a human from a release of a regulated substance that requires medical treatment or hospitalization. Medical treatment includes any treatment, other than first aid, administered by a doctor or registered personnel under the supervision of a doctor. Two employees were monitored for potential exposure, which at most qualifies as first aid level of treatment. The employees were not hospitalized and did not receive medical treatment under the care of a doctor.

B. Documentation of Inspections

EPA's letter states that RFAAP has not maintained documentation of each inspection and test performed on specified process equipment (Tanks A-1, A-2, A-3, and A-5) as required. A total of 15 records are identified as unable to be located.

Response: BAE's Mechanical Integrity program includes periodic inspections and tests on covered process equipment (including but not limited to Tanks A-1, A-2, A-3, and A-5) to ensure that the equipment is maintained in a manner appropriate for its intended application. Each manufacturing area conducts periodic maintenance checks on process equipment and documents the results of these checks in their preventative maintenance program. In addition, storage vessel thickness inspections are conducted by a third-party engineering firm.

Documentation of these inspections was provided to EPA in 2014 in response to information requests from NEIC. A small number of historical inspection records could not be located at the time of EPA's inspection; however, most of these records pre-dated BAE's period of operation and responsibility.